

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A data network for communicating data between a
2 sender unit and a receiver unit, comprising:
3 a core network including relay elements intercoupled by data links;
4 a gateway element coupled to the core network and to the sender unit, the receiver
5 unit being coupled to the core network, the gateway element having at least one information
6 table identifying at least one route from the gateway element through the core network to the
7 receiver unit, including data links which constitute the at least one route, allocations of
8 predetermined communication resources of the data links, and status information indicative of an
9 amount of currently used communication resources of the data links and an amount of currently
10 available communication resources of the data links of the one or more data links.
- 1 2. (Currently amended) A method of management of data communication
2 through a core network between a sender unit and a receiver unit that includes the steps of:
3 defining at least one communicative route through the core network between the
4 sender unit and the receiver unit that includes a plurality of network links that each have a
5 predetermined communication resource;
6 coupling the sender unit and the receiver unit to the core network with [[a]]
7 sending and receiving gateway elements, respectively;
8 allocating to the sending gateway element a first portion of the predetermined
9 communication resources of at least certain of the network links forming a communicative route
10 between the sending and receiving gateway elements, and maintaining at the sending gateway
11 element information indicative of the allocated predetermined communication resources and

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12 status information indicative of a currently used amount of the allocated communication
13 resources and a currently available amount of the allocated communication resources;
14 receiving at the sending gateway element a request from the sender unit for a data
15 transfer across the communicative route, the request including a specification of requested
16 communication resource[[:]], the sending gateway element checking the status information to
17 grant the request if the currently available amount of the allocated communication resources
18 ~~communicating capacity~~ of the communicative route is equal or greater than the requested
19 communication resource available.

1 3. (Original) The method of claim 2, including allocating a second portion
2 of the predetermined communication resource of the certain of the network links.

1 4. (Original) The method of claim 3, wherein the step of checking the
2 information includes reconfiguring the predetermined communicative resource of the certain of
3 the network links re-allocate at least a portion of the communicative resource allocated to the
4 receiving gateway element to the sending gateway element.

1 5. (Previously presented) The method of claim 2, wherein the predetermined
2 communication resource is a communication bandwidth.

1 6. (Previously presented) The method of claim 2, wherein the predetermined
2 communication resource includes a communication bandwidth.

1 7. (Currently amended) A method of admission control of data to a core
2 network having a number of relay nodes interconnected by data links, the method including the
3 steps of:

4 associating a predetermined data communication capacity with each of the data
5 communicating links;

6 communicatively coupling sending and receiving gateway elements to the core
7 network;

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8 connecting first and second data transfer elements to the sending and receiving
9 gateway elements, respecting, for data communication by a route through the core network
10 containing certain of the data links;
11 assigning first and second portions of the data communication capacity of at least
12 the certain of the data links to the sending and receiving gateway elements, respectively;
13 providing the sending gateway element with information indicative of the first
14 portion[[]], the sending gateway element responding to a request for data communication of a
15 requested capacity from the first data transfer element by checking the information, determining
16 status information indicative of currently used data communication capacity of the certain links
17 and currently available data communication capacity of the certain links, and granting the request
18 if the currently available data communication capacity of the certain data links is at least equal to
19 or greater than the requested capacity.

1 8. (Original) The method of claim 7, wherein the sending step includes re-
2 assigning at least a part of the second portion to the first portion of the data communication
3 capacity of at least one of the certain data links.

1 9. (Original) The method of claim 8, including the step of providing the
2 receiving gateway element with information indicative of the second portion.

1 10. (Original) The method of claim 9, wherein the step of re-assigning
2 includes decreasing the information indicative of the second portion by the part of the second
3 portion re-assigned to the first portion.

1 11. (Original) The method of claim 10, wherein the step of re-assigning
2 includes increasing the information indicative of the first portion by the part of the second
3 portion re-assigned to the first portion.

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1 12. (Currently amended) A system for providing a QoS communication route
2 from a first communicating entity to a second communicating entity through a core network that
3 includes a plurality of network links, the system including;

4 a data store comprising an information table of information indicative of a
5 predetermined communication resource associated with each network link;

6 a sending gateway element and a receiving gateway element respectively coupling
7 the first and second communicating entities to the core network;

8 assigning wherein the sending gateway element is configured to be assigned a
9 first portion of the predetermined communication resources of at least certain of the network
10 links forming a communicative route between the sending and receiving gateway elements, and
11 to maintaining at the sending gateway element information indicative of the allocated
12 predetermined communication resources and status information indicative of a currently used
13 amount of the allocated communication resources and a currently available amount of the
14 allocated communication resources; and

15 receiving at wherein the sending gateway element is configured to receive a
16 request from the sender unit for a data transfer across the communicative route, the request
17 including a specification of requested communication resource;

18 the sending gateway element checking the status information to grant the request
19 if the currently available amount of the allocated communication resources communicating
20 capacity of the communicative route is equal or greater than the requested communication
21 resource-available.

1 13. (New) The data network of claim 1, further comprising:
2 a trunk management system ,wherein the gateway element periodically sends the
3 status information to the trunk management system.

1 14. (New) The data network of claim 13, wherein the trunk management
2 system allocates bandwidth of the predetermined communication resources of the data links.

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1 15. (New) The method of claim 7, wherein the sending gateway element
2 periodically sends the status information to the trunk management system.

1 16. (New) The method of claim 15, wherein the trunk management system
2 allocates bandwidth of the certain links of the route based on the status information indicative of
3 currently used data communication capacity of the certain links and currently available data
4 communication capacity of the certain links.

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